

Inspection Guidance for Transfer Stations, Materials Recovery Facilities, and Waste-to-Energy Facilities

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1995

INSPECTION GUIDANCE FOR TRANSFER STATIONS, MATERIALS RECOVERY FACILITIES, AND WASTE-TO-ENERGY FACILITIES

The purpose of this document is to provide guidance to Local Enforcement Agencies (LEAs) regarding procedures for conducting inspections of small and large volume transfer stations, materials recovery facilities (MRFs), and waste-to energy facilities (WTEFs).

The applicable statutes and regulations of the Public Resources Code (PRC) and Title 14, California Code of Regulations (14 CCR) for transfer/processing stations listed on the Solid Waste Information System (SWIS) inspection report forms for small and large volume transfer stations are bolded, italicized, and listed in their entirety. Currently, no specific regulations exist for evaluation of MRFs and WTEFs. At this time, these facilities are regulated under 14 CCR, Chapter 3, Article 6, Transfer/Processing Stations. Guidance for interpretation and application of statutes and regulations follows each listing.

Since levels of experience vary among inspectors, this document is designed for all levels of expertise. Also, statute and regulation guidance is designed for the individual standard. Due to regulatory overlap, guidance may be repetitive in some instances.

STATE REQUIREMENTS

The Board is required to conduct at least one inspection every 18 months of solid waste landfills and transformation facilities (i.e., WTEFs) and submit a written inspection report to the LEA within 30 days of the inspection (PRC § 43220). The Board will also conduct periodic inspections of transfer stations and MRFs to evaluate the LEA and to ensure that SMS are met (PRC §§ 43214(a), 43219). When the Board is acting as the EA, it will inspect sites at the same frequencies required of the LEA.

LOCAL REQUIREMENTS

The LEA is required under PRC § 43209 to develop, implement, and maintain an inspection program. Title 14, Section 18303 requires the LEA to conduct investigations of allegations concerning a SWF (including transfer station, MRF, and WTEF) where it has reason to believe that a violation exists. In accordance with PRC § 43218 and 14 CCR § 18083, the LEA is required to inspect each active and inactive SWF within its jurisdiction at least one time each month. In addition, the LEA is required by 14 CCR § 18083 to inspect SWFs at the following frequency:

- monthly for illegal sites and facilities pending abatement by enforcement action
- as necessary for permit actions or complaints.

Follow-up inspections to determine if a facility has corrected past violations should occur within ten business days after the established deadline for correction has elapsed.

PRE-INSPECTION PROCEDURES

During the pre-inspection workup, the inspector should read and become familiar with all sections of the most current valid solid waste facilities permit (SWFP) and Report of Station Information (RSI) or Plan of Operation. The information in these documents should be scrutinized for consistency with actual facility conditions and operations while conducting the inspection. The inspector should then determine if any of the applicable permit related statutes and regulations (PRC §§ 44002, 44004, 44014(b), and 14 CCR §§ 18213(b) and 18221) are in violation. In addition, the inspector should review documentation of public complaints concerning the facility. It is recommended that the enforcement agency keep a public complaint log.

LEA inspections should be coordinated in advance with other agencies when issues are involved which require their input. The appropriate agency should always be contacted concerning issues for which they have statutory or regulatory authority. In some cases, it is appropriate to contact several agencies (e.g., multi-media issues). It is recommended that the inspector contact the relevant fire protection authority, Regional Water Quality Control Board (RWQCB), Air Pollution Control District (APCD) or Air Quality Management District (AQMD) and other agencies which are mandated by either state, federal or local ordinance to govern compliance at the SWF. Information gathered will allow the inspector to assess compliance with SMS for issues which come primarily under the authority of these agencies.

INSPECTION PROCEDURES

Inspections performed pursuant to PRC § 43218 and 14 CCR should include a review of all standards published under 14 CCR, Division 7, Chapter 3 - Minimum Standards for Solid Waste Handling and Disposal. The inspection should also include a review of the facility's permit conditions. Non-compliance with any applicable permit condition should be noted in the inspection report. When the LEA conducts an inspection/investigation, the review should include applicable local regulatory requirements, in addition to those of the State.

The time allotted for a field inspection depends upon the size and complexity of the facility and inspection frequency. The guidance presented in this document is intended to cover a thorough inspection. All inspection-related procedures are listed so that the LEA may have access to such information; it is understood that a monthly inspection of a SWF by the LEA may not require consideration of each and every item presented here. However, the LEA is responsible for verifying that the facility is either in compliance or in violation of all applicable SMS each month.

In accordance with 18083(b), the LEA may conduct inspections without prior notice to the owner or operator, during normal business hours or the facility's operating hours. Inspections should be **unannounced** to the site operator, unless prevented by extraordinary circumstances.

Arriving at the Facility

In order to detect unpermitted operations and verify facility operating hours and security precautions, the inspector should arrive at the facility before it opens in the morning.

Gaining Access

When entering a facility for the first time, the inspector should drive first to the gatehouse via the same entry point used by the public and/or contract waste haulers. At the gatehouse, the inspector should state the following: name, employer, reason for site visit, and that photos may be taken as documentation. The employee at the gatehouse may either tell the inspector to go on with the inspection or direct the inspector

to speak with an official at the facility.

If no employee is present at the gatehouse, or there is no gatehouse or scalehouse, the inspector should attempt to find an employee at the site by going to the office area, maintenance area or the tipping floor. Upon finding an employee, the inspector should follow the introduction described above.

Denial of Access

If access is denied in any way, the inspector should politely determine if the individual denying access is the appropriate official to make such a decision. The inspector should ask the reason for denial of access and verify that the purpose and authority to conduct the inspection under the PRC are understood. If access is still denied, the inspector should abide by the operator's wishes, document the name of the person denying access, and then call his/her agency's supervisor. The supervisor, working with the appropriate county, state, or Cal/EPA legal staff, should pursue the steps necessary to gain access, using an inspection warrant. Note that PRC § 44101(b) allows an inspection without the consent of the owner/operator or the issuance of a warrant, in the event of an emergency affecting public health or safety. In addition to outright denial of entry, access denial may include preventing the inspector from bringing in necessary equipment (camera), preventing access to documents, or denying entry if the inspector refuses to sign a waiver or other legal document(s) restricting the owner/operator's liabilities or obligations.

The reception of the inspector and the helpfulness of SWF officials will vary from site to site. Most inspections can be accomplished without adversarial confrontations. However, inspectors may be threatened by facility representatives during an inspection. If threatened with violence, the inspector should immediately stop the inspection, leave the site or area where the threat exists, and contact his/her supervisor as soon as possible. The name of the person who has threatened violence and nature of the threat should be noted in the inspection report.

Health and Safety Considerations

Board staff recommend that each jurisdiction develop a health and safety plan for conducting inspections of SWF. The plan should include equipment requirements for field staff. For reference, the Board's Interim Field Health and Safety Plan requires Board inspectors to wear overalls, hard hat, safety vest, safety glasses and safety boots during an inspection. Ear protection, gloves, and a dust mask should also be immediately available. **See Appendix A for recommended health and safety equipment.**

In addition to being aware of hazards associated with facility operations, the inspector should avoid other sources of potential injury, including bees, wasps, spiders, snakes, poison oak, and wild animals (e.g., bears, rodents, and feral cats).

Exit Interview

At the beginning of the inspection, the inspector should notify the operator that an exit interview will be conducted at the conclusion of the inspection. The exit interview is a summary of the inspection results which allows the inspector to communicate inspection findings to the operator. If the operator is unable to attend, the inspector should contact the operator by telephone to conduct the exit interview.

DOCUMENTATION

Early in the day, the inspector should determine the best time to interview appropriate site personnel and to

inspect facility records. This will allow the inspector to ensure that a supervisor or facility manager is present to answer questions and to find or provide access to necessary records.

The inspector should carry a SWIS inspection report form for transfer stations (**Appendix B**), appropriate health and safety equipment, and a camera throughout the inspection. This allows notes and photographs to be taken as issues arise. It also serves to prevent missing one-of-a-kind photo opportunities. Throughout the inspection, the inspector should periodically refer to the SWIS report form to assure that each standard is addressed and that there is enough time to evaluate the remaining standards.

The inspector should also bring a copy of a facility map or diagram. When possible, compliance status and all notes, observations, and comments, should be made during the inspection, not later in the office.

Evidence includes all field notes, SWIS inspection form reports, photographs, samples, and drawings and maps made by the inspector on the day of the inspection. The inspector should maintain control of all such evidence during an inspection and thoroughly review it before leaving the site.

Field notes should be used to record the results of all observations and measurements. To ensure proper documentation, field notes should be signed, dated, and contain the proper facility file number. These field notes are then subject to public records requests.

Photographs provide the best documentation of what an inspector has actually observed. Therefore, it is extremely important that each photograph be properly identified and tied into the inspection report for later use as evidence. As telephoto or wide angle lenses may distort both the scale and the image, photographs taken with these lenses should include a notation of the lens type.

When possible, the inspector should document each violation with photographs. The inspector should note the facility name, SWIS number, date, time, film roll number, direction faced, and name of the inspector taking the pictures in his/her notes. Later, when the developed slides or prints become available, the inspector should transfer this data to the prints or slides and initial or sign each one. When taking photos, it is sometimes appropriate to include some items that will show comparative scale, such as a clipboard, person, or vehicle. The violation should be clearly shown in each photo so that it is understandable to anyone viewing it. Portable video equipment is also available to Board inspectors for documentation purposes; an LEA may request that a Board inspector document violations with this equipment.

Maps and drawings may be used to document the facility layout on the day of the inspection as well as the location of violations and photo points. These should be carefully drawn with only the necessary details. A compass should always be used to establish a north arrow. Actual distances (from hip chain measurements or measuring wheels) should be shown when necessary.

Estimates for applicable standards (i.e., amount of waste accepted per day) should be obtained from the facility operator. If the estimates do not appear to be accurate, this should be noted in the inspection report. If estimates are made by the inspector, the method used should be included in the inspection report. Copies of on-site records should be made if they substantiate a violation.

If an observation is the sole evidence of a violation, the inspector should describe the activity causing the condition of violation either in the inspection report or notice of violation, including maps or diagrams, where appropriate. This description should include, what the inspector observed, and why the observation

should be considered a violation. When a judgement is made regarding the adequacy of monitoring or controlling the effects of an operation, a complete discussion of the facts should include the adequacy of those controls.

LEA APPROVALS

The following CCR, Title 14 SMS may require the LEA to provide a finding, determination, requirement, or approval to the operator of a solid waste disposal facility:

- 17425 Small Volume Transfer Station Operation
- 17461 Weight Volume Records
- 17474 Site Attendant
- 17481 Identification Signs
- 17485 Visual Screening
- 17494 Lighting
- 17495 Fire Fighting Equipment
- 17497 Personnel Health and Safety
- 17512 Cleaning
- 17513 Solid Waste Removal
- 17516 Salvaging Permitted at Transfer Stations
- 17517 Volume Reduction
- 17520 Storage of Salvage
- 17522 Non-Salvageable Items
- 17534 Drainage Control
- 17535 Litter Control
- 17557 Station Maintenance Program
- 17562 Hazardous Wastes
- 17564 Liquid Wastes

Title 14, Section 18077(a)(9) requires that, "At a minimum, the EPP shall include the following written component: a procedure manual for inspection, investigation, compliance assurance, enforcement, and hearing panel utilization."

The LEA should review the above standards to assess those requirements which may require additional guidance and/or action to the operator of a solid waste facility. For purposes of illustration, 14 CCR 17461 states that "each station operator shall maintain records of weights or volumes handled in a manner and form approved by the Enforcement Agency." The LEA should establish written requirements for the operator describing appropriate maintenance of these records, e.g., records should be kept in a binder and copies sent to the LEA on a monthly basis. These requirements should be forwarded to the operators of solid waste facilities and be included in the LEA's Enforcement Program Plan (EPP).

Documentation mechanism(s) for LEA approval concerning SMS should also be described in the EPP. For example, the mechanism could include the requirement that a written request be submitted by the operator to the LEA when an increase in salvaged material storage volume is sought. In addition, the mechanism could include the requirement that the LEA respond to the operator's request in writing and both the request and response be forwarded to the Board.

RECORDS

Facility records which should be reviewed include all documentation required by the following SMS:

17461 - Weight/Volume Records

17462 - Special Occurrences

Under certain circumstances, other documents which may be reviewed to assess state minimum standards include salvage material removal records and the facility Injury and Illness Prevention Plan (IIPP).

Salvaged material storage records may indicate the types of materials being salvaged and their removal frequency. The IIPP may include personnel health and safety equipment requirements of the LEA and information on site personnel training programs.

INSPECTION REPORT

The LEA is required by PRC § 43218 to file, within 30 days of the inspection, a written report in a format prescribed by the Board. The prescribed format for this report is the SWIS inspection form. LEA inspection reports should be completed and forwarded to the Board's Enforcement Branch staff person assigned to your agency's jurisdiction. The Board is required by PRC § 43220 to prepare and submit a written inspection report to the LEA within 30 days of a state inspection.

INTERAGENCY COORDINATION

In addition to the Board and LEAs, a number of governmental agencies have authority over aspects of solid waste disposal. Further coordination mechanisms will be developed by the AB 1220 implementation group and subsequent guidance provided to the LEAs. During the interim, potential and/or alleged violations of other agency's statutes and regulations should be noted on the inspection report and the appropriate agency should be contacted. A partial listing of agencies which may have authority over disposal sites include the State Water Resources Control Board, a Regional Water Quality Control Board, the Department of Health Services, the Department of Toxic Substances Control, the Department of Forestry, the Cal/OSHA Department of Occupational Safety and Health, the Air Resources Board, Local Air Pollution Control or Air Quality Management Districts, local and state fire agencies, the U.S. Army Corp of Engineers, the Coastal Commission, the Federal Aviation Administration, the Department of Fish and Game, and the United States Environmental Protection Agency.

FACILITY TYPES

Transfer or Processing Stations

PRC § 40200 states that transfer or processing stations include those facilities utilized to receive solid wastes, temporarily store, separate, convert, or otherwise process the materials in the solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport, and those facilities used for transformation.

A transfer station is a facility where the transfer of wastes from smaller collection vehicles to larger transport equipment takes place. The waste is then hauled to a processing or disposal site. The most common method of transport in California is by motor vehicle, usually trailers, semitrailers, and compactors. However, the transport of wastes by rail (rail-haul) is increasing.

Facilities whose principal function is to receive store, separate, convert, or otherwise process in accordance with SMS, manure, or wastes which have already been separated for reuse and are not intended for disposal are not transfer or processing stations. Guidance for these types of facilities is not included in this document.

Small Volume Transfer Stations

Stations which receive less than 100 cubic yards of wastes per operating day are classified as small volume transfer stations.

It is important to schedule inspections of small volume transfer stations on the days and during the hours that they are open. Many small volume transfer stations are not open continuously or have restricted hours of operation. Sometimes this will mean scheduling an inspection on a weekend.

Records for small facilities will usually not be at the site. Therefore, the inspector should determine, prior to inspection, where they are located and make arrangements to review them.

Inspecting a small volume transfer station involves two main standards. The first standard, section 17425 - Small Volume Transfer Station Operation, requires good operating practices, the protection

of public health and safety, adequate control of drainage and minimization of nuisances. Section 17426 - Cleaning and Waste Removal Frequency, requires weekly cleaning and waste removal unless different frequencies are specified in the governing RFI or permit.

General guidance is given below under "Large Volume Transfer Stations". Some of the information presented in this section may be applicable to small volume transfer stations as well.

Large Volume Transfer Stations

Stations which receive 100 cubic yards or more of wastes per operating day are classified as large volume transfer stations, per § 17401.

A large volume transfer station has three major areas covered by SMS. These include the tipping floor or pit, the facility perimeter, and the station entry/gatehouse/office area. At the tipping floor or pit, several of the SMS can be evaluated. These include section 17496 - Protection of Users, 17511 - Confined Unloading, 17515 - Scavenging, 17538 - Traffic Control, and 17562 - Hazardous Wastes.

The inspector should walk the transfer station perimeter looking for points of illegal access, visual screening problems, litter, and signs of contaminated drainage leaving the site. At the perimeter, the inspector should also look for nuisance problems including those of dust, noise and odor.

When it is convenient, the inspector should go to the gatehouse or office area of the transfer station and check records, signs, communications facilities, potable water supply, and station sanitary facilities. Hazardous waste screening should take place at the gatehouse or scalehouse.

Other important areas to check at a transfer/processing station include salvaging and recycling areas and equipment storage areas. In these areas, the inspector should look for illegal wastes, fire hazards, safety hazards and for wastes stored in vehicles and bins.

The inspector should check with key station personnel early enough to ensure that records can be found and the necessary people are available for interviews during the inspection.

The inspector should verify that the local health entity (if other than the EA) and fire authority maintain a list of the names, addresses, and telephone numbers of the operator, station manager, and supervisor.

In addition to health and safety equipment, the inspector should also carry a camera, flashlight, and Solid Waste Information System (SWIS) inspection report form for transfer stations.

Materials Recovery Facilities (MRFs)

A MRF is a facility which sorts and processes materials that are collected elsewhere and brought to the MRF for the purpose of recovery of recyclable materials. The transfer of wastes is an integral part of the operation. The transfer facilities at a MRF are relatively smaller than transfer stations because recyclables have been removed from the waste stream.

In general, the primary purpose of sorting operations is to separate recyclable from non-recyclable materials. Sorting may consist of a can separator, a conveyor with hand-sorting stations, or a mixed waste processing system with a magnet operation for segregation of ferrous metals, mechanical screens, separators and classifiers. Large objects may be separated from small objects, and high density from low density items with an air clarifying system, centrifugal system, or other appropriate system. Volume may be reduced by shredding and compaction.

At present, most MRFs are not separate, independent facilities, but are often incorporated into new or existing transfer stations. Those MRFs that are part of larger facilities are rarely accessible to the public.

However, since operations are potentially dangerous, it is important that the public be excluded from access to the sorting/processing areas. The safety of the employees who perform the actual separation of recoverables from the waste stream will require close observation by the inspector. The inspector should determine whether appropriate safety equipment, including that required by the LEA, is being used.

There are two basic types of MRFs: Clean MRFs and dirty MRFs.

"Clean" MRFs are facilities that receive materials which have been segregated from the general waste stream, generally through a curbside collection program. In a fully source separated system each material type arrives at the facility separate from all others, or where only one material is recovered, as in a cardboard only collection from retail businesses. These facilities usually do not require a SWFP as they accept only segregated recyclables and have minor amounts of residual waste for disposal.

A **"dirty" MRF** receives a mixed waste stream of recoverable resources which have not been separated from the municipal solid waste stream. These materials may be known as commingled recyclables. In a fully commingled system, mixed waste materials arrive completely mixed together. In this case, the wastes are brought into a processing facility and as many recyclables are removed as can be marketed.

After gaining access to a MRF, the inspector should first go to the sorting area (not found at transfer stations) to determine if waste has been removed according to schedule and that the area has been cleaned properly from the previous day's operations. This area must be closely evaluated by the inspector for potential health and safety problems, including those related to conveyor belts, eye protection, and dust.

Transformation/Waste-To-Energy Facilities (WTEF)

Transformation means incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. Transformation processes are used to reduce the volume and weight of waste requiring disposal and recover conversion products and energy. The only type of transformation facilities currently permitted by the Board are WTEFs. As stated above, those facilities engaged in transformation processes shall be considered transfer/processing stations. Typically, the collection vehicles are weighed at the scalehouse and the wastes unloaded into the storage pit. A crane mixes

the waste in the pit, removes bulky items, and then picks up the waste and deposits it into a feed chute which leads to the furnace. The residual ash is processed for the removal of scrap iron.

A major part of the inspection will be concerned with documenting that these facilities are operating according to the conditions of their SWFP including any related air emission standards.

When inspecting WTEF, the inspector will be faced with several issues not found at a standard transfer station. One issue is pit management. Section 17513 - Solid Waste Removal, requires waste to be removed from the pit every 48 hours or in accordance with an approved operations schedule. An LEA approved operations schedule could allow a portion of waste to remain for longer than 48 hours in a properly managed pit. This is allowed in order to maintain a continuous fuel supply to the combustion chamber during times when the facility is not receiving waste.

Another issue is the disposal of ash and metal. While WTEF that burn municipal solid waste (MSW) realize at least an 80-90 percent volume reduction, 10-20 percent remains in the form of ash or metal. This ash may be hazardous, abrasive, or caustic, and could create dust problems. The inspector must determine whether the ash is being properly handled and stored on-site, tested to determine if it is a hazardous, designated or solid waste, and ultimately disposed at a facility permitted to receive it. Proper handling of ash should address adequate personnel protective equipment, including respirators, gloves, coveralls, and eye protection.

Currently, there are three permitted waste-to-energy facilities operating in California which burn municipal solid wastes.

STATUTES/REGULATIONS GUIDANCE

Following are the applicable laws and regulations of the PRC and Title 14 for small and large transfer stations, materials recovery facilities, and waste-to-energy/transformation facilities. The laws/regulations are bolded and italicized, with guidance listed immediately below.

PERMITS

44002 Operator Authorized by Solid Waste Facility Permit

The operation of a solid waste facility by any person, except as authorized pursuant to a solid waste facilities permit issued by the enforcement agency, is prohibited.

If the current operator of a facility is found to be different from the operator listed on the permit, it is a violation of this section. Also, if the facility has never been permitted and it has been determined by the Board and LEA that this site now needs a permit, it is a violation of this section.

44004 Significant Change

(a) No operator of a solid waste facility shall make a significant change in the design or operation of any solid waste facility except in conformance with the terms and conditions in an approved solid waste facilities permit or revised solid waste facilities permit issued to the operator.

(b) If the operator wishes to modify the design or operation of a solid waste facility, the operator shall file an application for revision of the existing solid waste facilities permit with the enforcement agency. The application shall be filed at least 120 days in advance of the date when the proposed modification is to take place.

(c) Under circumstances which present an immediate danger to public health and safety or the environment, as determined by the enforcement agency, the 120-day filing period may be waived.

Title 14, § 18211(c) states, "A change shall be deemed significant for purposes of this section if and only if it does not conform to terms and conditions of the permit." If the LEA has made a determination that the site has undergone a significant change in facility conditions from those allowed by the SWFP and RFI, and documented the determination in a permit review report or SWIS inspection report, a violation should be noted for PRC § 44004 - Significant Change and PRC § 44014(b) - Permit Terms and Conditions. A significant change may prompt further California Environmental Quality Act (CEQA) analysis, as well as a revision of the SWFP. Note that Board inspectors may make a determination of significant change only after consultation with the LEA, the Board's permit and environmental review staff and his/her supervisor.

Significant changes which are most often found in violation include: tonnage increases, expansion of operations into property not within the current permitted boundary, new operations (composting, energy recovery, etc.) and the acceptance of unpermitted wastes such as ash, sewage sludge, and designated non-hazardous wastes which require special handling.

44014(b) Permit Terms and Conditions

The permit shall contain all terms and conditions which the enforcement agency determines to be appropriate for the operation of the solid waste facility. The operator shall comply with all terms and conditions of the permit.

If the inspector finds that the operator is not complying with all terms and conditions of the current valid SWFP (e.g., due to a significant change in operations), it is a violation of this section. Items which may not constitute a significant change, such as a violation of specific monitoring requirements of the SWFP or the inclusion of recycling operations or the receipt of special waste not described in the SWFP or RFI, may constitute a violation in accordance with this section.

The inspector should note an area of concern if the SWFP does not include a daily peak volume limit and the permitted average volume has been exceeded on any given day. This should only apply to old permits

as all new SWFPs contain daily peak volume limits.

18213(b) Review of Permits

No less than 120 days before the permit is due for review, the operator shall submit an application for review of its permit. The application shall be made in the manner specified in section 18201. Sections 18202 through 18208 shall apply to the application for review.

Section 18213(a) requires that every permit be reviewed, and if necessary, revised at least once every five years. Subsection (b) sets the time frame for the operator to submit an application for the permit review. This section is in violation if the operator has not submitted an application for permit review at least 120 days prior to the required review and the review was not completed by the due date.

Standards Applicability (Small Volume vs. Large Volume Transfer Station)

17401 Applicability of Standards

Stations which receive less than 100 cubic yards of wastes per operating day shall be governed by only Sections 17400 through 17426. All stations receiving more than 100 cubic yards of waste per operating day shall be governed by only Sections 17400 through 17413 and Sections 17440 through 17564. The standards contained in this Article shall be in force for all stations which are in operation on or after July 1, 1976, or prior to that date if provided in the county solid waste management plan developed and approved pursuant to Section 66780 of the Government Code. (Note: Sections 17400 and 17440 do not exist).

The volume of wastes and recyclables which are commingled with wastes which enter the facility determines whether the facility is regulated as a small volume or large volume transfer station. Source separated recyclables do not count toward the volume; however, recyclable materials which enter the facility commingled with wastes (i.e., non-recyclables) count toward the total volume of waste received.

Small Volume Transfer Stations

Stations which receive less than 100 cubic yards of wastes per operating day are classified as small volume transfer stations.

17421 Exclusions

These standards shall not be construed to apply to those locations where less than 15 cubic yards of combined container volume is provided to serve as community or multi-residence receptacles for residential refuse, nor do they apply to storage receptacles for waste from multi-residential buildings or for commercial solid wastes; a container used to store construction or demolition wastes at the place of generation; or containers used to store salvaged materials.

No further guidance at this time.

DESIGN

17422 Design

The engineering design of proposed new small volume transfer stations shall be in accordance with the principles and disciplines in the State of California generally accepted for design of this type of facility. The design of each new small volume transfer station shall be submitted to the Enforcement Agency for review.

It is Board policy to determine a site to be in compliance with this section if the facility was given a grandfathered permit (i.e., commenced operations prior to July 1, 1976). If unsure of the adequacy of a design, the inspector may contact the Board's Closure and Remediation Branch environmental engineering staff for technical assistance.

RECORDS

17423 Plan of Operation

Each operator of a small volume transfer station shall prepare and submit to the Enforcement Agency a plan of operation for the station summarizing procedures for handling complaints, maintenance, health and safety, site controls, and frequency of removal of wastes from the station.

If a plan of operation has not been submitted or if it does not have the above mentioned elements, this standard has been violated.

17424 Records

An annual report shall be made to the Enforcement Agency reporting the estimated weights or volumes handled during the previous year and listing special occurrences such as fires, injury, property damage, accidents, explosions, incidents regarding hazardous wastes, flooding, and other unusual occurrences.

No further guidance at this time.

17441 Report of Station Information

Each operator of a transfer/processing station, as defined in Public Resources Code section 40200, must file with the enforcement agency a Report of Station Information or, if the station is a Small Volume Transfer Station, a Plan of Operation. (See section 18221 of this title for content requirements of the Report/Plan.) The information contained in the Report or Plan shall be used by the enforcement agency to determine whether a permit should be issued. The operator must file amendments to the Report or Plan whenever necessary to keep the information contained in it current.

The inspector should read and become familiar with the most recent and/or governing RFI (the governing RFI is the one specifically referenced in the most current SWFP with concurrence by the Board) before

going to a site. The inspector should bring the working file with a copy of the RFI along on the inspection.

The most recent RFI and amendment(s) must reflect current site operations as evaluated during the inspection. If changes in operation have been made, amendments which keep RFI information current must be filed with the LEA and forwarded to the Board. Documentation of receipt by the EA is needed to prove filing.

When applying Section 17441, the inspector should record all discrepancies between the most recent RFI (and any amendments) and actual design and operations in the field notes. If the most recent RFI is not the governing RFI, this should be stated in the inspection report. It should also be explained to the permittee that the most recent RFI and any necessary amendments shall be incorporated into the SWFP. Section 17441 requires that amendments to the RFI be filed, but it does not require that they be concurred with by the Board. However, the operator may be required to revise or modify the SWFP prior to implementing the changes proposed in the RFI. The RFI need not duplicate information contained in the Report of Waste Discharge (ROWD) or Waste Discharge Requirements (WDRs).

OPERATIONS

17425 Small Volume Transfer Station Operation

Small volume transfer stations shall be operated in conformance with good operating practices which result in minimal public health and safety hazards, minimal vector propagation, containment of waste materials, pickup of litter, control of drainage and nuisances, and shall comply with those requirements of the Enforcement Agency adopted to achieve these results.

Under this standard, it is possible for the inspector to enforce any actions consistent with maintaining good operating practice. For example, an attended site in a remote area should be required to have a telephone or radio, sanitary facilities and a water supply, if no facilities are located nearby. The absence or adequacy of any of these should be evaluated using this standard.

CLEANING/WASTE REMOVAL

17426 Cleaning and Waste Removal Frequency

The small volume transfer station shall be thoroughly cleaned weekly or as required in the solid waste facilities permit. Any solid wastes deposited at the site shall be removed weekly or as required in the solid waste facilities permit.

The inspector should try to inspect the site on the specified cleaning or waste removal day to verify compliance with this section.

Large Volume Transfer Stations, Materials Recovery Facilities, and Waste-To-Energy Facilities

Stations which receive 100 cubic yards or more of wastes per operating day are classified as large volume transfer stations. Currently, no specific regulations exist for evaluation of MRFs and WTEFs. At this time, these facilities are regulated under 14 CCR, Chapter 3, Article 6, Transfer/Processing Stations.

18221 Report of Station Information (RSI)

In order to obtain a solid waste facilities permit, each operator of a transfer/processing station, as defined in Public Resources Code section 40200, must file with the Enforcement Agency a Report of Station Information or, if the station a Small Volume Transfer Station, a Plan of Operation as required in section 17441 of this Title. In order to maintain the permit, the operator must file amendments as required in section 17441 of this Title. Such amendments or lack thereof may become the basis for changes in the permit or revocation of the permit. A Report of Station Information shall contain the following:

- (a) Plans and specifications for the station, to include a site location map, a site plan, and identification of adjacent land uses and distances to nearby residences.*
- (b) An engineering report describing processes to be used, including proposed pollution control devices and estimated quantities and types of solid wastes to be processed. Information of proprietary nature need not be disclosed.*
- (c) A descriptive statement of the operations conducted at the station.*
- (d) A schematic drawing of the buildings and other structures showing layout and general dimensions for unloading, storage, compaction, processing, parking and loading areas.*
- (e) A descriptive statement including the means to control litter, odors, rodents, and insects; emergency provisions for equipment breakdown or power failure; and the maximum length of time solid waste will be stored in the station.*
- (f) The description of transfer equipment including type, capacity and number of units.*
- (g) An estimate of the design capacity and current daily capacity of the station in tons.*
- (h) A description of provisions to handle unusual peak loadings.*
- (i) Anticipated amount and planned method for final disposal of nonrecoverable or nonmarketable residues or ashes.*
- (j) Anticipated volume of quench or process water required and planned method of treatment and disposal of any wastewater.*
- (k) Resume of the management organization which will operate the station.*
- (l) A compilation of conditions, criteria, and requirements reestablished by the various approval agencies having jurisdiction over the station.*

Generally, this standard is evaluated during the permitting process. In the event that a SWFP is issued and it is later determined that the requirements of this standard were not adequately addressed in the RFI, a violation of this standard may be noted.

Do not cite section 18221 for discrepancies between the RFI and site operations. These discrepancies are addressed by section 17441 and/or PRC sections 44002, 44004, and 44014(b).

RECORDS

17441 Report of Station Information

See small volume transfer stations section 17441 for regulatory language and guidance on this standard.

Prior to the inspection of a facility, the inspector should read and become familiar with the Report of Station Information (RSI). The inspector should bring the working file and a copy of the RSI along on the inspection. The RSI must reflect current facility operations as evaluated during the inspection and, if

changes have been made, an amendment must have been filed with the EA in order to keep RSI information current. The inspector should record all discrepancies between the conditioning RSI (referenced in the SWFP) and actual operations. If the most recent RSI is not the conditioning RSI, this should be stated in the inspection report; the most recent RSI and amendments must be incorporated into the SWFP through the next permit modification or revision.

Deficiencies of the most current RSI with regard to content requirements or actual operations become the basis for a violation of section 17441. This section requires that amendments to the RSI be filed, but does not require that they be concurred with by the Board until the next modification or revision of the SWFP. Discrepancies between actual operations and the current permit including its conditioning RSI are addressed by PRC sections 44002, 44004, and 44014(b).

17461 Weight Volume Records

Each station operator shall maintain records of weights or volumes handled in a manner and form approved by the Enforcement Agency. Such records shall be sufficiently accurate for overall planning and control purposes.

If a site has scales, the accuracy of records is easy to calculate since records are maintained by weight (i.e., tare vs. total weight). Tare is defined as the weight of a vehicle deducted from the total weight to determine the weight of the load. At sites without scales, where cubic yardage is converted to tonnage, it is important that the operator provide reasonable documentation verifying accuracy of weight or volume records. If cubic yardage is converted to tonnage, the site operator must be able to supply a conversion factor or conversion procedure that can be justified. If the facility waste input figures are in cubic yards and no conversion factor exists for determining tonnages, the following conversion factors may be used for the purposes of the inspection:

- 220 lbs/yd³ for private vehicle waste loads
- 500 lbs/yd³ for residential compacted waste
- 1600 lbs/yd³ for sewage sludge

Note: The above figures for municipal waste are from Managing Sanitary Landfill operations, May 1989, Government Refuse Collection and Disposal Association. The figure for sewage sludge is from Conversion Factors for Individual Material Types by the Tellus Institute (**Appendix C**).

The inspector must also determine whether records are kept in the form and manner required by the LEA.

17462 Special Occurrences

Each operator of a station handling an average of 100 or more cubic yards of waste per operating day shall maintain a log of the following information; fires, injury and property damage accidents, explosions, incidents regarding hazardous wastes, flooding and other unusual occurrences.

This log should be maintained as a single entity at one location, for example, as a bound logbook, a file stored in a cabinet, or electronically as a clearly identified computer file. The log should serve as a record of these situations, their resolution, and an indicator of recurrent hazards or trends which can affect operations. Daily entries are encouraged in order to discover patterns early and to develop a regular

routine of entry. If there are no special occurrences on a given day, it is recommended that "No special occurrences" or a similar entry be made.

17463 Inspection of Records

The records shall be open to inspection by authorized representatives of the enforcement agency, the local health entity and other duly authorized regulatory and enforcement agencies during normal business hours. Information of a proprietary nature, if identified as confidential pursuant to Governments Code Section 6250 et seq., shall be treated as confidential.

Records should not be in an unreasonable location such as another state. If records are kept at another location other than the facility, the inspector should travel to that location and view the records on the day of the inspection or, if not possible, request that the operator send copies of the records to the inspector within two weeks of the inspection.

INFORMATION

17442 Station Modifications

The Enforcement Agency shall be notified of significant changes in the design or operation of the station.

No further guidance at this time.

Design

The following three standards (Sections 17451, 17452, and 17453) address station design and apply to design problems which impact users, personnel and/or operating machinery. Board staff consider a site to be in compliance with each of the Design Standards (17451, 17452, 17453) if the site was given a grandfathered permit (i.e., the site was operating before July 1, 1976). Sites which commenced operations on or after July 1, 1976, should be evaluated to determine if inadequate site design has resulted in violations of other SMS as identified in these regulations. Closure and Remediation Branch staff can provide technical assistance in the evaluation of complex designs. CEQA documents may contain relevant information concerning site design.

17451 Design Responsibility

The design of a new station shall utilize expert advice, as appropriate, from persons competent in engineering, architecture, landscape design, traffic engineering, air quality control, and design of structures.

No further guidance at this time.

17452 General Design Parameters

Each station design shall be based on appropriate data regarding the service area, anticipated nature and quantity of wastes to be received, climatological factors, physical settings, adjacent land

use (existing and planned), types and number of vehicles anticipated to enter the station, drainage control, the hours of operation and other pertinent information. If the station is to be used by the general public, the design shall take account of features which may be needed to accommodate such public use.

No further guidance at this time.

17453 Public Health Design Parameters

The station shall be designed in such a manner as to minimize the propagation or attraction of flies, rodents or other vectors and the creation of nuisances by reason of solid wastes being deposited at the station. Other factors which shall be taken into consideration are water and air quality, noise control, odor control, public safety, and other pertinent matters related to the protection of public health.

No further guidance at this time.

PERSONNEL

17471 Availability

It is the responsibility of the operator of the station to provide adequate numbers of qualified personnel to staff the station and deal effectively and promptly with matters of operation, maintenance, environmental controls, records, emergencies, and health and safety. In this regard, cross-training and development of standby arrangements are encouraged.

During the inspection, the inspector should obtain or make a general list of site personnel, including the names and titles of key site officials and numbers and types of personnel by function. After watching a day's operations, the inspector should consider the daily site tonnage, types and quantities of equipment, and overall site operations to determine if the number of site personnel is adequate to properly handle all site operations in a safe and environmentally responsible manner. Failure to comply with SMS relating to load screening, equipment operations, vector control, litter control, drainage control, supervision, etc., may be indicative of a violation of this standard.

17472 Training

Personnel assigned to operate the station shall be adequately trained in subjects pertinent to station operation and maintenance, with emphasis on safety, health, environmental controls, and emergency procedures.

The inspector should ask site supervisors and personnel about the facility's training programs for operations, maintenance and safety. In addition, training records should be reviewed. If answers or records are vague and/or if no training program can be documented, this is an indication that training is a problem. Essential disposal site training should include personnel safety, hazardous materials recognition and screening, and heavy equipment operations in waste.

Note: The Cal/OSHA Labor Code, Title 8, CCR, Section 64107.7 sets training requirements for worker

safety. Each facility is required to have an Injury and Illness Prevention Plan (IIPP), which may be referenced for site specific training requirements.

17473 Supervision

The station operator shall provide adequate supervision to insure proper operation of the station in compliance with all applicable laws, regulations, permit conditions and other requirements. The Enforcement Agency, local health entity, and fire authority shall be kept advised of the names, addresses and telephone numbers of the operator, station manager and supervisor.

The LEA and local fire authority must be able to substantiate the knowledge or record of the information referenced in this standard. The LEA should contact the local fire authority periodically to verify that the required notification has been made by the operator. The operator may also choose to notify the appropriate fire authority by mail and send a copy to the LEA.

The station supervisor should be present at the facility for at least a portion of the operating day. Supervision is especially important at MRFs which have a hand sorting line. Responsible supervision includes ensuring that personnel use appropriate health and safety gear at all times and observe proper safety practices.

The existence of a number of violations of SMS can be indicative of poor supervision and may be cause for citing a violation of this standard. If a site has a chronic problem with several operational minimum standards which are related to a lack of proper resource utilization (staffing and/or equipment), a supervision violation should be given.

17474 Site Attendant

Stations which are open to the public shall have an attendant on duty during operating hours or be visually monitored when determined by the Enforcement Agency to be necessary to prevent problems of health, fire or safety significance.

If the facility does not have an attendant, the LEA should determine a schedule for inspection by the operator. The site should be visually monitored by the operator for problems of cleaning, waste removal, personnel health and safety, scavenging, and other general operations standards. It is recommended that site personnel be required to monitor the site at least once per operating day. Board staff also recommend that a written schedule be established by the LEA and a copy forwarded to the operator and Board.

SIGNS

17481 Identification Signs

Each point of access from a public road shall be identified by a suitable sign indicating the name of the station operator. Other pertinent general information may be required by the Enforcement Agency as approved by the local land use authority.

Encourage the operator to include other data such as the contract operator's name (if any), telephone number, and the type of facility. This information provides easy identification for emergency vehicles and the public.

17482 Entry Signs

If the station is open to the public, there shall be a sign at an appropriate point indicating the schedule of charges, hours of operation, and listing the general types of materials which either (1) WILL be accepted, or (2) WILL NOT be accepted.

Keep in mind that this standard is only applicable if the site is open to the public. The information on the sign should be checked for consistency with the RSI and the SWFP as well as the actual operating hours and practices.

SECURITY

17483 Station Security

The station shall have adequate perimeter barrier designed to discourage unauthorized entry by persons or vehicles. Where water or topographic conditions are such as to create a similar effect, a barrier is not required. Areas within the site which are deemed hazardous shall be separately fenced and properly identified to create an adequate level of security.

Gates should be locked after operating hours. Damaged fencing should be repaired. If sites are open continuously (24 hours), gates and areas deemed hazardous must be fenced or kept under surveillance by site attendants. Hazardous areas may include operations which pose a public safety threat to users of the facility (e.g., glass and metal storage piles). The inspector should look for signs of illegal entry such as tire tracks which enter the facility at the site perimeter.

ROADS

17484 Roads

Roads and driveways shall have a reasonably smooth surface which is designed to minimize the generation of dust and the tracking of material onto adjacent paved public roads, and shall be constructed to withstand regular and thorough cleaning. Such roads shall allow vehicles utilizing the station to have reasonable all-weather access to the station.

If vehicles using the station are observed generating excessive dust (visibly obscuring vehicles), bottoming-out or getting stuck in ruts or mud, a violation should be documented. This standard applies only to roads within the permitted facility boundary.

VISUAL SCREENING

17485 Visual Screening

The station shall have appropriate treatment of areas open to public view to create and maintain an attractive and aesthetically acceptable appearance as approved by the Enforcement Agency and the local land use authority.

Screening may be in the form of attractive fencing, walls, landscaping or architecture.

CONSTRUCTION

17486 Station Construction

Solid waste storage containers shall be durable, easily cleanable, designed for safe handling, and constructed to prevent loss of wastes from the equipment during storage. If such equipment is used to store garbage, other wet or liquid producing wastes, or wastes composed of fine particles, such equipment shall in all cases be nonabsorbent and leak-resistant. Unloading areas shall be easily cleanable, designed for safe handling and constructed to prevent loss of wastes. All equipment shall be in good condition and cleaned in a frequency and in a manner so as to prevent the propagation or attraction of flies, rodents, or other vectors and the creation of nuisances.

No further guidance at this time.

SANITATION

17491 Sanitary Facilities

Adequate sanitary facilities for the station personnel shall be available at the station or in the immediate vicinity.

For purposes of uniformity, adequate sanitary facilities consist of a sanitary toilet and handwashing facility with soap. The inspector must use his/her discretion, based on site-specific conditions to decide what is to be considered the "immediate vicinity".

17492 Water Supply

Safe and adequate drinking water for the station personnel shall be available.

The operator should provide the water supply and personnel should not be required to bring their own water. Employees may forget to bring water and/or weather or unexpected conditions may require the availability of an additional supply. A city water line, bottled water, clean water tanks certified structurally sound, or wells tested potable by the local health agency are acceptable.

Note: As a guideline for testing potability, note that Title 22, § 64411 requires that domestic wells of public water systems serving greater than 25 people at least 60 days per year, be tested monthly for bacteria and every three years for total chemicals.

COMMUNICATIONS

17493 Communications Facilities

Each station shall have adequate communications facilities available to the station personnel.

The use of two-way radios or cellular phones may meet the communication requirement of this section. The inspector should list the current facility telephone number in the inspection report and periodically verify that the equipment is operating.

LIGHTING

17494 Lighting

Where operations are conducted during hours of darkness, the station and/or equipment shall be equipped with adequate lighting as approved by the Enforcement Agency to insure safety, to permit monitoring effectiveness of cleaning operations and for inspection of loaded transfer vehicles.

A violation should be noted if, as a result of inadequate lighting, site personnel or the public is endangered or operations can not be conducted in accordance with SMS. Lights on vehicles, without other sources of light, are not adequate to meet the requirements of this standard.

SAFETY

17495 Fire Fighting Equipment

Station personnel shall have properly maintained fire suppression equipment continuously available in sufficient quantities and located as required by the local fire authority and Enforcement Agency.

The inspector should verify that all fire control equipment such as hoses, sprinkler systems, fire extinguishers and alarms are fully operational. For fire extinguishers, check the inspection frequency and the date of last recharge. If an inspector is concerned with any lack of firefighting equipment, the local fire authority should be informed within ten business days.

17496 Protection of Users

Stations shall be designed, constructed and operated so that contact between users and solid wastes is minimized. Railing, curbs, grates, fences shall be provided as necessary to adequately protect the public and station personnel.

Children should be required to remain in vehicles and personnel should continually monitor the public tipping area and other areas accessible to the public.

Some MRFs allow the public to unload recyclables directly into material processing areas. Those areas which are open to the public should be free of hazards such as falling objects, large stacks of recovered materials, equipment, belts, slippery surfaces and loud noises. The public should not be allowed to linger in

the processing areas of the MRF.

17497 Personnel Health and Safety

Operating and maintenance personnel shall be required to wear and use approved safety equipment as determined necessary by the Enforcement Agency.

LEAs should issue requirements for wearing safety equipment and review and revise these requirements as necessary. This requirement is usually stated in the RFI or SWFP. Approved safety equipment may include hard hats, gloves, steel-toed and steel-shanked boots, dust masks, safety vests, and hearing protection. This is especially important for employees who sort and separate the recoverable materials from the waste stream. If the inspector determines that LEA-required safety equipment is not in use by site personnel, a violation should be noted.

Note: Title 8, CCR, enforced by Cal/OSHA, contains personnel health and safety requirements. If the inspector is aware of a violation of Title 8, Cal/OSHA should be informed.

CONFINED UNLOADING

17511 Confined Unloading

Unloading of solid wastes shall be confined to as small an area as practicable. Adequate control of windblown materials shall be provided.

The unloading area at a facility should be large enough to handle the peak number of vehicles using it without causing traffic safety problems, personnel or public safety hazards, or waiting or stacking up of vehicles. The LEA may require litter fences and routine litter pickup to adequately control windblown materials at a facility which is subject to high winds and is not fully enclosed.

CLEANUP

17512 Cleaning

Each station handling an average volume of over 100 cubic yards of waste per day shall be cleaned daily of all loose materials and litter, or on a schedule approved by the Enforcement Agency. All boxes, bins, pits or other types of containers used shall be cleaned on a schedule approved by the Enforcement Agency.

Daily cleaning can best be assessed by observing the condition of the site at the start of the day's operation.

WASTE REMOVAL

17513 Solid Waste Removal

Any station handling an average volume of over 100 cubic yards of waste per day shall have any solid wastes deposited at the site removed every 48 hours or in accordance with an approved operations schedule.

Board staff recommend that waste is removed at a minimum of once every 48 hours, unless the facility's operations preclude it (e.g., a WTEF which requires a continuous fuel supply to the combustion chamber).

The inspector should verify that waste is removed in accordance with the approved operations schedule. This may be verified through weight/volume records and interviews with site personnel.

PARKING

17514 Parking

Uncleaned transfer vehicles containing putrescible materials shall not be parked on public streets or roads except under emergency conditions. Adequate off-street parking facilities for transfer vehicles shall be provided.

No further guidance at this time.

SALVAGING/PROCESSING

17515 Scavenging

Scavenging shall be prohibited at any station.

Scavenging means the uncontrolled and/or unauthorized removal of solid waste materials (Section 17225.63). Scavenging can be verified by visual observation and/or interviews with site personnel.

17516 Salvaging Permitted at Transfer Stations

Recovery of materials, such as metal, paper and glass, is permitted as an integral part of the operation of a transfer station, subject to conditions established by the Enforcement Agency, the local land use authority, or other approval agencies. Salvaging shall not interfere with other aspects of transfer station operation, nor shall it be conducted so as to interfere with expeditious entry and egress of vehicles delivering waste to the transfer station.

Salvaging means the controlled removal of waste material for utilization (Section 17225.61). Salvaging should be conducted in an area which is safe and separated from moving equipment. Salvaging operations should be described in the RFI.

17517 Volume Reduction

Volume reduction operations such as baling or shredding are permitted at a transfer station provided they are conducted in a controlled manner as an integral part of the operation and in conformance with conditions established by the Enforcement Agency, the local land use authority

and other approval agencies. Volume reduction activities shall not interfere with other aspects of station operation and shall be controlled to minimize health, safety or nuisance problems.

The inspector should look for potential fire hazards from salvaged materials, including cardboard, newspaper, and magazine piles. In addition, the inspector should watch for safety hazards to equipment operators and problems associated with dust, noise, vectors, leachate and standing water.

17518 Processing Area

Salvaging and volume reduction shall be confined to specified, clearly identified areas of the transfer station.

Salvaging and volume reduction areas should be located so that problems do not result from traffic or commingling and/or contamination of salvaged materials. Users of the facility should be able to easily locate the appropriate salvaged materials drop-off area(s).

17519 Processing Operations

Waste processing activities conducted at the station shall be conducted in an organized manner and shall be controlled to minimize health, safety or nuisance problems.

The inspector should look for overflowing piles of glass, cardboard, metals, etc., and excessive buildup of waste or litter near baling machines which can create safety problems. The manner in which waste processing personnel conduct operations should be observed for actions which may result in health and safety problems.

17520 Storage of Salvage

Salvaged materials generated on-site or imported shall be placed from storage away from other activity areas and be limited to a volume as approved by the Enforcement Agency, local land use authority or other approval agencies which (1) minimizes the harborage or attraction of flies, rodents or other vectors and the creation of nuisances and (2) minimizes the risk of fire or other hazards.

The inspector should be aware of potential hazards from improper storage of salvaged materials, including health effects from containers contaminated with food, combustion of paper products, and injuries to personnel or the public from sharp glass and metals. In addition, materials stacked too high may be unstable and could result in crushing injuries. Tin cans, aluminum, cardboard, newspapers, glass, etc., all have the potential of creating problems related to this standard.

17521 Removal

Storage of materials salvaged from solid wastes shall be ancillary to the operation of the station unless such storage is planned as an integral part of the operation. The maximum storage time shall be limited to a duration which will not result in health or fire problems.

Stored salvaged materials such as ferrous metal, cardboard, aluminum, and glass should not cause health or fire problems, nor should they be allowed to pile so high that they become a physical threat to site personnel and patrons. The operator should be able to document a reasonable removal frequency, usually through a contract with a salvager. The removal frequency should be based on the type and volume of material, whether storage of salvaged materials interfere with operations, and the location of the facility. If there is no removal contract, there is probably a violation of this standard.

17522 Non-Salvageable Items

Drugs, cosmetics, foods, beverages, hazardous chemicals, poisons, medical wastes, syringes, needles, pesticides and other similar materials capable of impairing public health shall not be salvaged unless approved by the Enforcement Agency and the local health entity.

No further guidance at this time.

NUISANCE

17531 Nuisance Control

Each station shall be operated and maintained so as not to create a public nuisance.

§ 17225.45 states: "Nuisance" includes anything which is injurious to human health or is indecent or offensive to the senses and interferes with the comfortable enjoyment of life and property, and affects at the same time an entire community or neighborhood or any considerable number of persons although the extent of annoyance or damage inflicted upon the individual may be unequal and which occurs as a result of the storage, removal, transport, processing or disposal of solid waste.

A facility should be considered in violation of this standard if a major nuisance, other than dust, litter or odor (which are already covered by other standards) is observed. This standard may be used to address a noise nuisance since 17536 - Noise, only addresses health hazards from noise. In addition, a glare nuisance may be addressed under this standard. If a nuisance is related to water quality, the appropriate RWQCB should be informed. An example would be receipt of a complaint of odor or color changes observed in water from domestic wells which may have occurred as a result of facility operations.

DUST

17532 Dust Control

The operator shall take adequate measures to minimize the creation of dust.

Throughout the inspection, the inspector should visually evaluate dust control. If excessive dust is observed and the operator has taken no steps to control it (e.g., overhead sprinkler), the facility is violating this section. Dust is excessive when it obscures visibility, irritates eyes, hampers breathing and coats equipment and personnel. Dust control measures should be described in the RFI.

An area of concern should be noted if the site has numerous violations concerning dust control issued by the Air Pollution Control District (APCD) or Air Quality Management District (AQMD) and/or a recent

history of citizen complaints, even if the inspector does not observe a violation of this standard during the inspection.

The inspector should be aware of fugitive dust problems at MRFs. Fugitive dust is composed of dust and fine particulates that arise from mechanized operations. These particles become suspended in the air and then escape the premises through the movement of the air. Fugitive dust is common at MRFs and may be seen as fine coatings of dust on plants or structures outside the facility or property boundary.

One of the most common methods of dust control at transfer stations and MRFs is to use an overhead sprinkler or misting system to wash/wet down facility equipment and/or the waste stream during operations. This may cause other problems such as slippery floors, large amounts of contaminated washwater which must be adequately handled, and contamination of materials which are being salvaged (e.g., cardboard and paper). The inspector should confirm that any dust control system is functioning properly and does not cause additional problems at the site.

VECTORS/BIRDS

17533 Vector and Bird Control

The operator shall take adequate steps to control or prevent the propagation, harborage or attraction of flies, rodents or other vectors and to minimize bird problems.

Populations of birds, mosquitoes, and other insects or animals which can transmit disease to humans must be prevented or controlled. The operator of a facility with bird problems should be encouraged to use the wire/grid system after consultation with the Department of Fish and Game. Nuisance problems concerning the migration of birds from a facility to nearby residences should be addressed under this standard. In addition, bird problems may include the propagation, harborage or attraction of birds that are natural enemies of endangered or threatened species that are endemic to the area surrounding a site (e.g., desert sites where ravens, a natural enemy of the desert tortoise, are attracted to landfills).

An inspector should consider a site to be in violation of this section if excessive numbers of adult flies are present or if immature stages of flies or mosquitoes (larvae or pupae) are observed developing to the adult stage on site. It is a good indication that flies or mosquitoes are excessive if the inspector is bothered by them while walking around the site. If clusters or groupings of flies are seen on fences, walls, vehicles or other lower attractant areas, there is a fly problem.

If a live rat is seen at the facility during the inspection, this is an indication that more rats exist and that there may be a rat problem. Active rat burrows or fresh droppings also indicate a rat problem. Also, many ground squirrel burrows near the facility are an indication that these rodents are filling the rat's niche. These rodents can act as disease vectors.

DRAINAGE/EROSION

17534 Drainage Control

Drainage shall be handled as specified in the station design, unless an alternative method which achieves the design objectives is approved by the Enforcement Agency. Drainage leaving the

station shall not contain solids, wash water or leachate emanating from solid wastes. Placement of drainage or cleanup water in a sanitary sewer shall be prohibited unless approved by the local sewerage authorities. Drainage control should be coordinated with the California Regional Water Quality Control Board.

When appropriate, the RWQCB and Department of Fish and Game should be alerted if existing drainage structures for run-on and run-off are overflowing, plugged or otherwise inoperative, or when substantial amounts of sediment are observed leaving the site and entering waterways. Sediment from erosion can also be harmful to fish in waterways. The adequacy of the drainage structures may be determined by comparing them with the design specified in the RFI and should be verified with the RWQCB. The inspector should look for erosion that undermines roads and structures causing a potential safety hazard or threatens the integrity of control systems. If problems are noted, Closure and Remediation Branch staff can provide technical assistance in the review of drainage and erosion design.

LITTER

17535 Litter Control

Litter and loose materials shall be routinely collected and disposed of properly. The collection frequency shall be set with the objective of preventing the accumulation of quantities which are aesthetically objectionable or cause other problems. The Enforcement Agency shall periodically monitor the effectiveness of the litter control program.

A litter violation exists if litter has blown off-site in objectionable quantities or is allowed to accumulate excessively on-site (i.e., piling up on fences, against buildings, vehicles, and the loading bay).

NOISE

17536 Noise Control

Noise shall be controlled to prevent health hazards to persons using the station and to nearby residents.

A violation of this standard should be noted if noise in any area of the permitted site is hazardous (can cause hearing damage) to persons using the site or to residents living nearby.

This standard does not apply to site personnel. Concerns regarding noise hazards to site personnel should be referred to Cal/OSHA's Department of Occupational Safety and Health. Although noise standards enforced by Cal/OSHA (Table 1) apply exclusively to site personnel, Board staff recommend that these levels be referenced when making a noise hazard determination under this standard. When unsafe noise levels are suspected at a facility, the LEA may request that Board staff evaluate noise levels at the site. Measurements of noise levels will be performed with a Sound Level Meter.

NOTE: Title 8 noise standards, enforced by Cal/OSHA, require the employer to administer a "Hearing Conservation Program" if an employee is exposed to the action level [continuous 8 hours at 85 dBA (Time-Weighted Average)]. In this case, hearing protectors should be made available to site personnel. Cal/OSHA standards are listed in **Table 1**. Site personnel should not be exposed to impulsive or impact

noise that exceeds a peak sound pressure level of 140 dBA.

Table 1. Permissible Noise Exposures For Site Personnel
Duration Per Day
(hours)

Sound Level,
Slow Response
(dBA)

8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110
0.25 or less	115

ODOR

17537 Odor Control

The station shall not be a source of odor nuisances.

Odors are excessive if they are detected at objectionable levels to the inspector at a property boundary which is bordered by residences or other sensitive receptors. Odors may indicate the presence of decomposition gases and should be checked with a combustible gas indicator (CGI). These facilities do not usually have sufficient quantities of waste to create a problem with decomposition gas.

Chronically excessive odors should be brought to the attention of the appropriate air quality agency (AQMD, APCD, or ARB). An area of concern should be noted if the site has had numerous odor violations issued by the APCD or AQMD and/or a recent history of citizen complaints, but the inspector does not observe a violation of this standard during the inspection.

TRAFFIC

17538 Traffic Control

Traffic flow into, on and out of the station shall be in accord with the design intent and in such a manner so as to minimize interference and safety problems for traffic on adjacent public streets or roads. Specifically, stacking of vehicles waiting to enter the station on public streets or roads may only occur as approved by local traffic engineering and police authorities.

Concerns regarding off-site vehicle stacking should be referred to the local traffic authority, planning department, or police.

EQUIPMENT

17546 General

Equipment shall be adequate in type, capacity and numbers to permit the station operation to meet all requirements of these standards. Equipment shall be maintained so as to consistently perform the work for which it is intended, ordinary wear and tear excepted.

The inspector should make a note of any large-scale station equipment such as skip-loaders, balers, trommels, conveyors, etc. If such equipment is inoperable and operations suffer as a result of malfunction, it is a violation of this standard. During the inspection, the inspector should attempt to judge the overall maintenance level of the facility. Equipment breakdowns may indicate an overall maintenance problem.

17547 Standby Equipment

Specific units of standby equipment are not required, providing the operator maintains an up-to-date list of firms or agencies which can supply needed and adequate replacement units within a reasonable period of time.

No further guidance at this time.

17548 Transfer Vehicles

Transfer vehicles shall be adequately covered and constructed of durable and easily cleanable materials.

The inspector should observe transfer vehicles entering and exiting the station and note whether wastes fall from the vehicles as well as how adequately the vehicles are covered to prevent loss of wastes at higher speeds.

17549 Inspection of Equipment

Equipment used for transport of solid wastes shall be made available for inspection as requested by the appropriate Enforcement Agency.

Although an LEA is not required to inspect vehicles during each monthly inspection, the equipment must be made available upon request. Vehicles used for the collection and transport of refuse must meet the requirements of §§ 17341- 17344.

17550 Housekeeping

A high standard of housekeeping is required in the maintenance of station equipment. Accumulations of fuel drums, parts, inoperable equipment, tires, scrap and similar items must be minimized unless reasonably screened from outside the station boundary.

No further guidance at this time.

MAINTENANCE

17556 General

Effective preventive maintenance procedures and programs for equipment and station facilities shall be developed and utilized.

No further guidance at this time.

17557 Station Maintenance Program

The operator shall frequently monitor and promptly repair or correct deteriorated or defective conditions with respect to requirements of these standards and conditions established by the Enforcement Agency or other approval agencies.

No further guidance.

SPECIAL WASTES

17561 Burning Wastes

If burning wastes are received, they shall be deposited in a safe area and extinguished. A safe area is defined as being away from unloading, processing and transfer areas, structures on adjacent properties and other fire hazard areas. The operator shall seek advice and concurrence from local fire authorities regarding safe areas and means of extinguishing burning wastes.

The inspector should note a violation if there is a fire at the site or a hot load (smoldering ashes) is received and the above procedures are not followed. In these cases, the local fire authority should be informed. Observations regarding discharges of liquid from fire extinguishing should be brought to the attention of the RWQCB.

17562 Hazardous Wastes

Hazardous wastes may be accepted only if specifically authorized by the Enforcement Agency and in the manner approved by that agency. A transfer/processing station handling hazardous waste shall comply with Division 4, Chapter 2, Title 22, California Administrative Code.

Hazardous wastes that are received and separated from the waste stream must be handled with the proper precautions to protect site personnel, the public, or animals, until disposed of properly. Proper precautions include adequate packaging, labeling and secure storage until removal, appropriate personal protective equipment and adequate personnel decontamination facilities. Illegal receipt or storage of hazardous waste should be brought to the attention of the Department of Toxic Substances Control (DTSC) or the local agency which is responsible for the implementation of the hazardous waste program. Some examples of hazardous waste that may be found at a transfer station, MRF, or WTEF include used

motor oil, latex and solvent-based paints, paint thinners, batteries, antifreeze, waste containing more than 1% friable asbestos, medical waste, and other household hazardous wastes.

Oil: Concerns regarding oil storage and spillage should be brought to the attention of the appropriate agency (DTSC and/or RWQCB).

Note: Up to 5,000 gallons of used oil may be legally stored for up to 90 days with proper secondary containment without having a permit as a hazardous waste storage facility in accordance with Health and Safety Code, § 25123.3. Tank systems must comply with secondary containment requirements of Title 22, § 66265.193, unless exempted in accordance with § 66265.193(g) or granted a variance under § 66265.193(g).

Used oil filters may be managed as non-hazardous waste only if the conditions set forth in Title 22, § 66266.130 are met.

Batteries: If a hazardous waste facilities permit is issued to the facility by the DTSC, batteries should be stored in accordance with its requirements. A hazardous waste facilities permit may not be required if: up to one ton of used lead-acid batteries (approximately 50 batteries) are stored for a maximum of one year or more than one ton of such batteries are stored for up to 180 days, in accordance with Health and Safety Code section 25218.8 (**Appendix D**). For estimating purposes, the industry standard is 40 pounds per battery. All batteries should be stored in accordance with Title 22 requirements.

If hazardous waste is seen on the tipping floor or other unpermitted areas of the site, it is a violation unless it is also seen by the operator who then takes appropriate action.

When illegal hazardous waste is discovered, the operator should isolate the material and contact the appropriate county health hazardous materials unit. The operator should attempt to determine the source of the material. Many facilities have hazardous waste storage units, and if the waste does not present an immediate threat, it should be properly stored in accordance with Title 22 requirements, at this location.

17563 Infectious Wastes

No infectious waste shall be processed through a transfer/processing station unless adequately preprocessed to eliminate any hazard.

Medical waste, as defined under California's Medical Waste Management Act, is not allowed at transfer/processing stations. When medical waste is discovered, the operator should contact the agency responsible for administering the Medical Waste Management Act, generally the LEA. Properly treated medical waste which is rendered non-infectious and deemed solid waste may be accepted. Properly treated medical waste will generally be contained within a red plastic biohazard

bag or an autoclave bag with heat indicator tape on it. The operator's loadchecking plan should address medical waste.

17564 Liquid Wastes

Liquid wastes and sludges may not be accepted at a station unless the station and transfer vehicles

are properly equipped to handle such wastes as authorized by the Enforcement Agency, the local health entity, and if applicable, the California Regional Water Quality Control Board.

Liquid wastes which may be accepted at a transfer station, MRF, or WTEF, should be specifically described in the SWFP and RFI. A violation should be noted if unpermitted or prohibited liquid wastes or sludges are accepted.

Concerns associated with liquid wastes, other than water quality, including odors, nuisance, and handling, should be addressed in the RFI and SWFP.

APPENDICES INDEX

- Appendix A Recommended Health and Safety Gear for Inspections of Transfer Stations, Materials Recovery Facilities, and Waste-To-Energy Facilities
- Appendix B SWIS Inspection Report Form for Transfer Stations
- Appendix C Conversion Factors for Individual Material Types
- Appendix D Health and Safety Code §§25218.2 and 25218.8 (storage of spent lead-acid batteries)